

Bridge

For gluteal and abdominal muscles



Why?

The gluteals are some of the most powerful but underused muscles in the body, especially in runners. Weakness and inactivation can lead to numerous running injuries including back pain, piriformis syndrome and SI (sacroiliac) joint pain. Weakness/inactivation of the gluteals also leads to biomechanical in-efficiency and 'calf-dominant' running.

How?

- Lie on your back with both feet flat on the floor and knees flexed to 90 degrees
- Brace* your core
- Squeeze your butt (gluteal muscles) to initiate the movement
- Lift your pelvis up off the ground
- Try not to extend through the lower back by not coming up too high
- Lift one leg without letting the hip drop on that side
- Slowly march out on your heels i.e. extend the knee out farther with each step, then walk back in to the starting position (90 degree knee angle)

Explanation:

The key is to maintain heel contact and gluteal muscle contraction so that during exercise and running, the most powerful muscles are strong and firing properly for speed and efficiency.

Sets:	2
Reps:	1 – 2 minutes
Hold:	3 seconds each leg
Frequency:	After or between runs/exercise

Dynamic Alternative:** Bounding on a flat surface or up a hill.

***Brace (your core muscles):**

Recent research shows that the common advice to pull in your belly button limits the full bracing capacity of your core muscles. Although pulling your belly button in activates a very important core muscle, it does so at the expense of several other key core muscles. This is why power lifters keep their stomachs out so their spines do not buckle during maximum lifts. Preferably, try to "bear down" as if you are going to be punched in the stomach for full core activation. For more research, please see Dr. Stuart McGill's work at: <http://www.ahs.uwaterloo.ca/kin/people/StuMcGill.html>.

****Dynamic Alternative:**

- **Bounding:** Leaping as high and as far forward as possible by driving the knee up and pushing off. It should feel as though you are trying to stay in the air as long as possible. Start with 10 steps, 2-3 sets and progress to 20 steps. An advanced version would be bounding up an

incline/hill. For a video demonstration go to:
<http://www.youtube.com/watch?v=mnhMpLONbtY&feature=related>